



Understanding the National Wetland Inventory (NWI)

Office of Water Quality

317-232-8603 • 800-451-6027

www.idem.IN.gov

100 N. Senate Ave., Indianapolis, IN 46204

Introduction

The National Wetland Inventory (NWI) is a digitized map developed by the U.S. Fish and Wildlife Service (USFWS) that provides information on the potential location, size, and type of wetlands across the country. Trained image analysts have identified and classified wetlands and deepwater habitats utilizing high-altitude aerial imagery. Polygons are drawn to represent potential wetland areas using map signatures which can be displayed over aerial imagery or other maps. This tool helps with preliminary project assessments, evaluates large-scale trends, and helps to educate policy makers and the public.



Caution: The NWI map does not portray jurisdictional wetland boundaries and should not be used for regulatory purposes. The NWI is intended to promote the understanding and conservation of wetland resources with an easily accessible platform. It has not been verified by wetlands experts and therefore is not a replacement for field investigations and scientific wetland delineations.

Did you know?

Before European settlement of North America, there were an estimated 220 million acres of wetlands in what is now the contiguous 48 states. About half that acreage has disappeared, mostly drained for crop production.

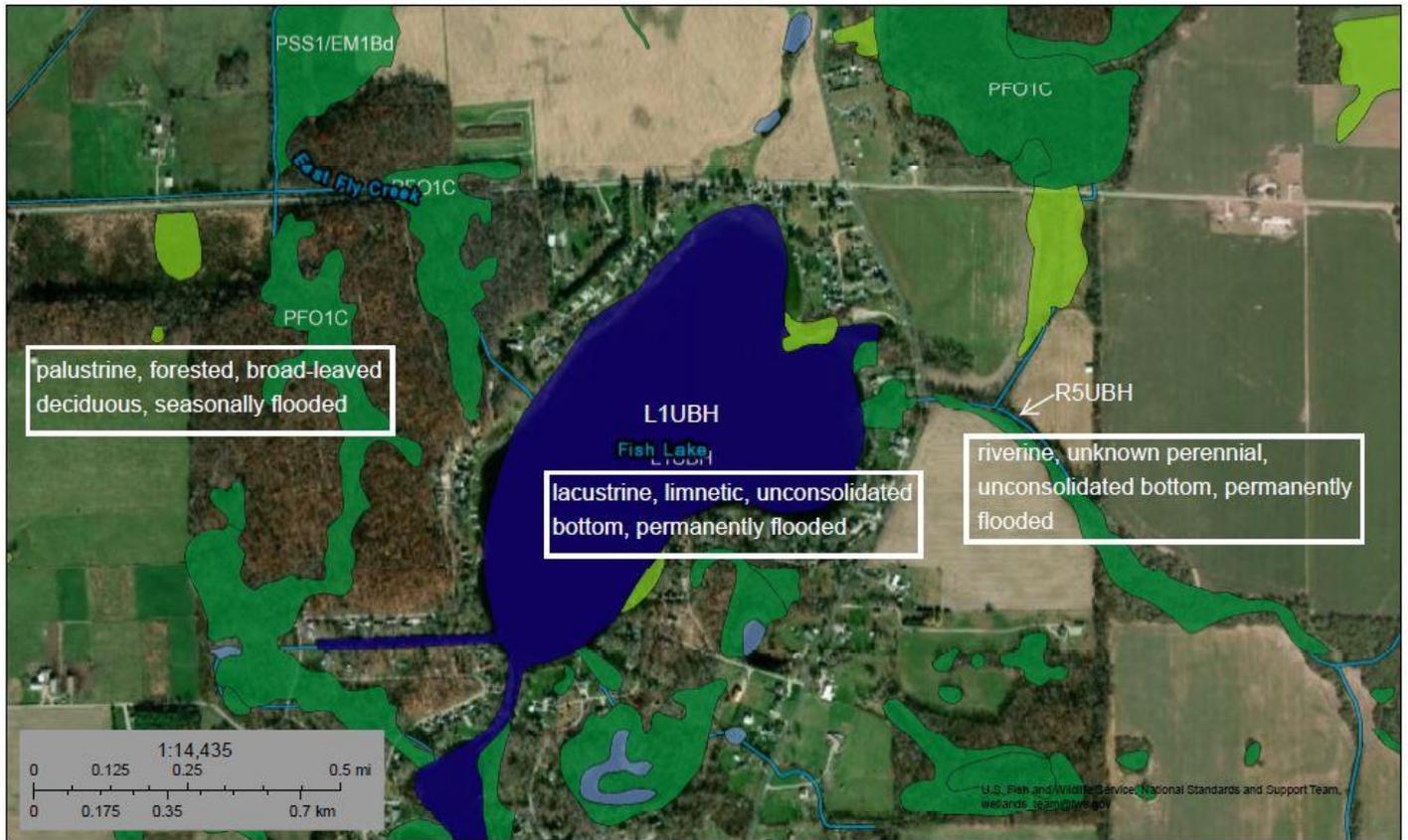
The NWI classifies wetlands by utilizing the Cowardin classification system.

- The Cowardin system uses a series of letters and numbers developed by the USFWS to provide comparable information about the status and extent of wetland resources.
- The alphanumeric codes correspond to the classification nomenclature that best describes a wetland habitat. These codes typically include features such as hydrology depth and duration, vegetative cover, dominant soils or substrate and landscape position.
 - Example: PFO1A = Palustrine (P), Forested (FO), Broad-leaved Deciduous (1), Temporarily Flooded (A) wetland.
 - https://www.fws.gov/wetlands/documents/NWI_Wetlands_and_Deepwater_Map_Code_Diagram.pdf.

Where is the NWI available? The NWI map is available online for free (Wetlands Mapper) and can be found on the USFWS website at <https://www.fws.gov/wetlands/data/Mapper.html>. The Wetlands Mapper does not require special software or training to use. Geographic Information System (GIS) users can access wetlands data through the online wetland mapping service or download data for various applications.

How to use the NWI:

- Go to the Wetland Mapper on the USFWS website.
- Follow the directions on the starting page.
- Zoom to area of interest.
- For additional information, click on the mapped wetland polygon.
- Print and save your map.



April 7, 2020

Wetlands

 Estuarine and Marine Deepwater	 Freshwater Emergent Wetland	 Lake
 Estuarine and Marine Wetland	 Freshwater Forested/Shrub Wetland	 Other
	 Freshwater Pond	 Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Figure 1. Example image of Wetland Mapper results with supplemental text descriptions



Helpful hints:

- NWI is a great starting point to determine the potential location of wetlands. However, it is not comprehensive and unmapped wetlands do exist. Actual wetlands may be smaller or larger than the polygon shown or not a wetland at all.
- Remember to look for other wetland indicators, such as hydric soils and hydrophytic vegetation. Wetland hydrology is not always apparent.
- The NWI must be field verified by a wetland professional and the boundaries confirmed by the U.S. Army Corps of Engineers prior to any development activities. Even if you are planning to avoid a mapped NWI, there may be other wetlands present or the wetland boundaries may be incorrect.
- Contact the Indiana Department of Environmental Management (IDEM) and speak with your local wetland project manager for free assistance. Visit <https://www.in.gov/idem/wetlands/> for more information.

Additional resources:

IndianaMap (<http://www.indianamap.org/>) includes NWI data and additional information.